## NF/268/01

## We claim:

- A process for preparation of β-keto aliphatic acid ester, which comprises growing a
   Bacillus sp. IICT 001 in growth medium for a period of at least 3-4 days to obtain broth,
   extracting the said broth with organic solvent, removing the solvent and purifying the β keto aliphatic acid ester.
- A process as claimed in claim 1 wherein the growth medium used is selected from the group consisting of nutrient medium and mineral salts medium.
- A process as claimed in claim 1 wherein the growth medium is supplemented with protein
  and carbon content selected from the group consisting of soyabean meal, corn steep
  liquor, casein, casein hydrolysate glucose and malf extract.
- A process as claimed in claim 1 wherein the growth of strain is carried out at a temperature range of 20 to 40°C and a pH in the range of 4.5-7.5.
- 5. A process as claimed in claim 1 wherein the solvent for extraction of broth is a chlorinated organic solvent selected from the group consisting of chloroform, dichloromethane and dichloroethane.
- A process as claimed in claim 1 wherein the solvent for extraction of broth is ethyl acetate.
- A process as claimed in claim 1 wherein the solvent for extraction of broth is a polar solvent selected from the group consisting of methanol, ethanol and a mixture thereof.
- 8. A process as claimed in claim 1 wherein the chromatographic method used comprises thin layer chromatography using silica gel as stationary phase and 1:1 methanol CHCl<sub>3</sub> as mobile phase, column chromatography, high pressure liquid chromatography.
- An antibiotic compound β-keto aliphatic acid ester isolated from Bacillus sp. IICT 001
  and possessing the following spectral properties

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UV max (MeoH): 225
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<sup>1</sup>H NMR CDCI<sub>3</sub>(80 MH<sub>2</sub>): 0.88 t (CH<sub>3</sub>); 1.25 s, br (CH<sub>2</sub>)n; 2.16s(COCH<sub>2</sub>); 3.68 s(COOCH<sub>2</sub>) IR. Vmax(CHCI<sup>3</sup>): cm<sup>-1</sup> 1730 (ester), 1670 (Carbonyl).
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A pharmaceutical composition comprising an effective amount of a β-keto aliphatic acid
ester isolated from Bacillus sp. IICT 001 and possessing the following spectral properties
UV max (MeoH): 225

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^1H NMR CDCI<sub>3</sub>(80 MH<sub>2</sub>): 0.88 t (CH<sub>3</sub>); 1.25 s, br (CH<sub>2</sub>)n; 2.16s(COCH<sub>2</sub>); 3.6° s(COOCH<sub>3</sub>) IR. ^{V}max(CHCI^{3}): cm^{-1} 1730 (ester), 1670 (Carbonyl) in admixture with a therapeutically acceptable carrier.
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